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**Letter to the Editor on "Deek N.F. Al, Kao HK, Wei FC. The fibula osteoseptocutaneous flap
Stenekes, Martin W; Witjes, Max J; Van Der Lei, Berend L**

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Letter to the Editor on “Deek N.F. Al, Kao HK, Wei FC. The fibula osteoseptocutaneous flap: concise review, goal oriented surgical technique, and tips and tricks. Plast. Reconstruct. Surg. 142: 913e, 2018”

Martin W. Stenekes, M.D., Ph.D.¹, Max J. Witjes, M.D., Ms.C.² and Berend L. Van Der Lei, M.D., Ph.D.^{1,3}

1. Department of Plastic Surgery, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands
2. Department of Maxillofacial Surgery, University Medical Center Groningen, University of Groningen, Groningen, The Netherlands
3. Bey Bergman Clinics, The Netherlands.

Corresponding author: Berend L. Van Der Lei, M.D. Ph.D, Department of Plastic Surgery, University Medical Center Groningen, University of Groningen, Hanzeplein 1, P.O. Box 30.001, 9700 RB Groningen, The Netherlands. E-mail: b.van.der.lei@umcg.nl

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Sir,

With great interest we have read the special topic article of Deek, Kao and Wei about the fibula osteocutaneous flap¹; a perfect overview with great videos. They state to provide a concise review of literature and address many tricks and details of their refined techniques for different reconstructions and did as such. However, in this review in the short paragraph about donor-site closure, an important trick about donor site closure is missing in case the skin defect cannot be closed primarily: using a full-thickness skin graft (FTSG) harvested in the proximal third aspect of the incision of the leg, which, as we have experienced, saves a donor site and reduces the complication and morbidity rate of the donor site significantly and has a significant better aesthetic aspect as compared to the use of a split thickness graft². The donor site of the osteoseptocutaneous fibula free flap with a STSG mostly results in poor cosmetics of an unsightly depression area, which occasionally also results in late wound breakdown and exposure of the peroneal tendons³.

The idea of using a FTSG from the donor leg arose from our earlier experience with closure of the donor side of the radial forearm flap with a FTSG taken proximally from the radial forearm donor site, which had superior esthetic results and better skin quality as compared to the use of STSG⁴. Technically we use two options. *Option 1 (see design in Fig 1)* Triangular shaped FTSG proximal with V-Y advancement; after the longitudinal incisions of the skin paddle of the fibula donor leg, a triangular shaped FTSG is harvested proximally from the skin paddle, slightly longer than the skin paddle of the flap but with a smaller width. The proximal part of the FTSG donor site can always easily be closed primarily and subsequently the FTSG is used according to the V-Y principle to close the more distal donor site. *Option 2 (see design in reference 2; fig. 1a)*. The FTSG is harvested as an island in the proximal part of the fibula donor leg, has the same length of the skin paddle with a smaller width.

In both options, our patients wear a splint for one week and after that a pressure bandage or a compression stocking.

Thus far, we have used both FTSG harvesting and fibula donor site closure technique in hundreds of patients with excellent results (see end result example in reference 2; fig 1d); good cosmetics are achieved with no depression of the donor site area of the fibula, as is the case with a STSG and no problems of late wound break down, as regularly occurs with a STSG (i.e. wound dehiscence). Also, we have never experienced functional problems nor problems of the donor site region of the FTSG.

As we all know, there are many ways to Rome and the authors have presented, based upon their huge experience, an excellent review; the use of a FTSG from the fibula osteo-septocutaneous donor leg for donor site closure may just add another small brick to their already perfectly flagged road about dealing with the fibula flap.

References

1. Al Deek NF, Kao HK, Wei FC. The fibula osteoseptocutaneous flap: Concise review, goal oriented surgical technique, and tips and tricks. *Plast Reconstruct Surg.* 2018; 142: 913e-923e.
2. Van der Lei B, Van Nieuwenhoven CA, De Visscher JGAM, Hofer SOP. Closure of the osteoseptocutaneous fibula free flap donor site with local full-thickness skin grafts. *J Oral Maxillofac Surg.* 2008; 66: 1294-1298.
3. Kearns M, Ermogenous P, Myers S, Ghanem AM. Osteocutaneous flaps for head and neck reconstruction: A focused evaluation of donor site morbidity and patient reported outcome measures in different reconstruction options. *Arch Plast Surg*, 2018; 45: 495-503.
4. Van der Lei B, Spronk CA, de Visscher JGAM Closure of radial forearm free flap donor site with local full-thickness skin graft. *Br J Oral Maxillofac Surg.* 1999; 37: 119-22.

Legend to the Figure

Figure 1. Design of harvest of the FTSG and fibula osteoseptocutaneous free flap according to option 1, harvesting a FTSG proximally as a triangle to be used in a V Y advancement / closure. (above) Preoperatively, (below) Postoperatively.

ACCEPTED

Figure 1

